

CXI. *Some Observations on the History of the Norfolk Boy.* By J. Wall, M. D. In a Letter to the Rev. Charles Lyttelton, LL. D. Dean of Exeter.

S I R,

Read Dec. 14,
1758. THE history of the Norfolk Boy, which, you inform me, has been communicated to the Royal Society, seems to deserve a place in the memoirs of that illustrious body, as well on account of its utility, as its singularity.

The symptoms in this case most evidently arose from worms in the intestines ; which often occasion unaccountable complaints, and frequently elude the most powerful medicines, as they did in the instance before us, till at last they were dislodged by the enormous quantity of oil-paint, which the poor boy devoured ; and the cause being thus removed, all the effects ceased.

At first sight it appears wonderful, that this immense quantity of white lead did not prove fatal ; and that it was not so, could be owing to nothing but the oil, by which it was enveloped, and its contact and immediate action on the coats of the intestines thereby prevented. But the oil did not only obviate the dangerous effects of this mixture, but appears, to me at least, to have been the chief cause of the success, with which it was happily attended. I speak this with some restriction, because the lead, as its fleypticity was thus covered, might, by its weight, assist in removing

removing the verminous filth, especially as the bowels were made slippery by the oil.

Oil has long been observed to be noxious to insects of all kinds, so that not only those, which survive after being cut into several pieces, but those also, which live long with very little air, and those, which revive by warmth after submersion in water, die irrecoverably, if they are immersed in, or covered with oil. Rhedi and Malpighi have made many experiments to this purpose; and account for the event very rationally from the oil stopping up all the air-vessels, which in these animalcula are very numerous, and distributed almost over their whole bodies.

On this account oil has been recommended as a vermifuge both by Andry and Hoffmann, though I believe it has been seldom used in practice in that intention; or at least has not been given in quantities sufficient to answer it. Indeed Hoffmann * himself

seems

* Oleosis magna tribuitur efficacia, quæ maxime experimento Fr. Rhedi videtur confirmata, dum mulcas et alia infecta variis liquoribus immersa in vivis permansisse refert, exceptis aliis oleo perunctis et infusis, quæ invicem mortua vitam non receperunt, licet radiis solaribus fuerint exposita. Evidenter concedo hæc omnia veritati esse consona, atque etiam oleosa, ut ol. oliv. rapar. et amygd. dulc. non sine fructu adhiberi: sed scire licet minime illa eo unquam scopo posse offerri, ut vermes enecent, quia admodum magna oleorum copia requireretur, si immediatè vermes per totum intestinorum volumen dispersos deberent extingui. Multo magis oleosa in gravibus a lumbricis symptomatibus ideo censerem utilia, quia sensibiles intestinorum tunicas spasmo constrictas relaxant, et mucilagine quasi obliniunt atque defendunt, ut postea acriora quædam et purgantia remedia magis securæ et sine læsione exhiberi possint. Ita ego sæpius mirabili cum effectu ad vermes enecandos et symptomata lenienda ol. amygd. d ad aliquot cochlearia, imo 3j vel

seems not to lay much stress on it as an anthelmintic, recommending it only as serving to line the inside of the intestines, and to relax spasms in them; and therefore as a proper preparative to be given before any acrid purgatives are ventured on.

The medicines commonly prescribed, and most depended on, are either of a virulent and drastic nature, or such as are supposed to be able to destroy those animals by some mechanical qualities *e. g.* to cut, tear, or otherwise affect their tender bodies, and yet not have force enough to lacerate or injure the stomach or intestines. Of the former kind are the leaves and juice of helleboraster, the bark of the Indian cabbage-tree, coloquintida, resin of jalap, glass of antimony, and the like; the effects of which are commonly violent and dangerous, and sometimes fatal. Of the latter class are crude mercury, and the milder preparations of that mineral, aloes and other bitters, tin filings, neutral salts, and vitriolic acids. Every one conversant in practice too well knows, how often these medicines are administered ineffectually. When I had therefore attentively considered the history of the Norfolk Boy, I determined to try the efficacy of oil in such cases, as it seemed capable of producing great effects, and yet could not be attended with any hazard or danger.

The first person, to whom it was given, with this view, was —————, a patient of our Infirmary,

vel 3ij circa lecti introitum vel summo mane pueris præscripti sumendum, subjungendo aliquot horas post pilulas ex extracto pan-chymagogo Crolli, resina jalappæ, et mercurio dulci paratas.

Hoffmann. Supplement. ad Med. Systemat. de Infant. Morb. cap. 10. de Vermibus.

who

who was judged to have worms, but had taken several approved medicines for a considerable time without success. In a consultation with the other physicians, the following form was prescribed.

R. Ol. Oliv. lb. ss. Sp. vol. aromat. 3ij M. cap. Cochl. iii. mane et H. S.

The volatile spirit was added here to make the oil saponaceous, and by that means more easily miscible with the juices in the stomach and *primæ viæ*. This medicine answered our expectations, and in a few days brought away several worms.

— Lacy, a poor boy of the parish of Feckenham in this county, aged 13 years, was, as I was informed, about three or four years ago seized with convulsive fits, which gradually deprived him of his senses, and reduced him to a state of idiocy. He had taken several anthelmintics and purgatives, particularly the *Pulv. Cornachin.* but never had voided any worms, though all the symptoms seemed plainly to shew, that they were the cause of his disorder. As he greedily swallowed any thing, which was offered him, without distinction, I at first ordered him a mixture of linseed oil 3vij *Tinct. sacr.* 3j: of which he took four large spoonfuls night and morning. He persisted in the use of this one whole week without at all nauseating it, towards the latter end of which time he voided one round worm of a great length. He now began to shew much aversion to the medicine; on which account the *Tinctur. sacr.* was omitted, and he was ordered to take the oil alone in the same quantities. This he continued to do a fortnight longer, during which time he voided 60 more worms, and in a great

a great measure recovered the use of his reason*. This account I had from the Apothecary, who, by my directions, supplied him with the medicines.

Soon after this I ordered the same medicine to be given to Elizabeth Abell, a poor girl in the same neighbourhood, reduced by epileptic fits to such a state of idiocy, as to eat her own excrements. It caused her to void several worms, but she did not recover her sences.

Since this time I have given the oil to several persons with good success, and therefore I cannot but recommend a further tryal of it; since it is a remedy, which may be used with safety in almost any quantity; a character, which very few of the anthelmintic medicines deserve.

It is probable, that some oils are more destructive to worms than others. Andry (*Traité de la Generation des Vers, cap. 8*) prefers nut oil, and tells us, that a human worm, voided alive, being put into that oil, died instantly; whereas another worm, voided at the same time, lived several hours in oil of sweet almonds, though in a languishing state. This difference he afterwards (*Cap. 9*) endeavours to account for, by supposing, that the oil of almonds is more porous, and consequently less able to preclude the entrance of air into the worms. And indeed there is some reason to conclude, that oils, which dry in the open air, such as nut and linseed oils, are of a closer texture, less mixed with water, and consequently more anthelmin-

* I have since been informed, that the boy's parents being extremely poor, the medicines were left off as soon as he began to recover; and that, upon their disuse for some time, he was again attacked with the same fits as before.

tic, than those oils, which freeze by cold, and will not dry in the open air;* such as those from olives or almonds. Andry tells us, that at Milan the mothers have a custom to give their children once or twice a week toasts dipt in nut oil, with a little wine, to kill the worms: and I know a lady in the country, who gives the poor children in her neighbourhood the same oil with great success.

I would recommend this remedy to be used in as large doses as the stomach will well bear: to which purpose it may be adviseable to join it either with aromatics, bitters, or essential oils, such as the cafe may require. Andry orders the oil to be taken fasting, assigning this for a reason, that the stomach being then most empty, it more readily embraces and stifles the worms. During this course it will be necessary, at proper intervals, to give rhubarb, mercurial or aloe-etic medicines.

I cannot close this paper without observing, that, from the history of the Norfolk Boy, we may learn, in similar cases, where the head is not idiopathic, never to despair absolutely of a cure, notwithstanding the disease has been of very long standing. For in this boy, though the oppression in the brain and nerves had continued many years, and had been so violent, as to deprive him not only of his intellectual faculties, but almost all his sensations; yet were not the organs much impaired thereby, but he recovered all his senses again, as soon as the irritation and spasms

* All oils dry more readily after they have been boiled; by which the superfluous aqueous parts are carried off. Drying oils are also made by the addition of such substances, as absorb humidities.

in the intestines, which first caused all these terrible symptoms, were removed. The same thing in a less degree was observable in the Feckenham Boy, mentioned before; and we have had two remarkable instances of the same kind at the Worcester Infirmary; where a boy and his sister, of the name of Moyles, received a perfect cure, and recovered the entire use of their fenses, after having been rendered idiots (though not in so high a degree as the Norfolk Boy) for more than two years, by epileptic fits proceeding from worms.

Worcester
Dec. 7, 1748.

J. Wall.

P. S. As the following history has some analogy with the subject we are now upon, I beg leave to subjoin it by way of postscript.

A young girl of the name of Lowbridge, at Ledbury, in Herefordshire, nine years old, had been long troubled with a gnawing pain at the stomach, which growing gradually more violent, I was at last called to her. About a quarter of an hour before I reached the house, she was seized with a violent vomiting, whereby she brought up an amazing number of living animals supposed, to be upwards of a thousand, together with a vast quantity of clear viscid phlegm. In shape they exactly resembled millepedes, except that some of them, being examined by a magnifying glass, appeared to have a small filament, which arose from the middle of the belly, and might probably have served to fix them to their nidus. They were of different sizes, from that of the largest millepede, to some

some, that were scarce perceptible; so that they appeared to have been generated at different times, and grown in the stomach. As the child was suddenly seized with this effort to vomit, she discharged her stomach on the floor of the parlour where she was sitting. The millepedes, they told me, were at first very lively, and crept briskly different ways; but they did not live long in the open air. They were lying in the slime when I came to her, so that I could not be imposed on as to the verity of the fact. After this evacuation, the child's stomach grew perfectly easy, and continued so.

CXII. *Observations upon the Corona Solis Marina Americana; The American Sea-Sun-Crown.* By John Andrew Peyssonel, M.D. F.R.S. Translated from the French.

Read Dec. 14, 1758. **I** Shall call this insect by this name, because of the resemblance it bears to the flower called *Corona Solis*; since it is, like this, open and spread.

This insect adheres to the rocks by its basis, which is flat and round; and tho' this roundness is sometimes mis-shapen, it is only occasioned by the inequalities of the rocks, to which it sticks. Its diameter is about two or three inches, bearing, from the center, certain rays, like white nerves, upon a moist flesh, of a livid violet colour. These rays or nerves pass from the centre to the circumference; they, too,